



ROLAND'S



GYMNASTICS

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AN
INTRODUCTORY COURSE
OF
MODERN
GYMNASTIC EXERCISES.

BY
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“ Dans la jeunesse de Platon, la peinture, la musique, les différentes exercices
du Gymnase remplirent tous ses moments.”—
Barthélemy, Voyage d'Anacharsis.

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GYMNASTICS.

INTRODUCTORY REMARKS.

IN a work like the present, which professes to be exclusively practical, any lengthened inquiry into the scientific principles of Gymnastics would be out of place. It is not probable, however, that any objections will be made to a few remarks, explanatory, historical, and recommendatory.

The meaning of the word Gymnastics, and its derivation, may be learned by the curious, if they take the trouble to turn up any respectable dictionary. It is at present sufficient for our purpose to remark, that, in the wider and more vague sense in which it is used in common *parlance*, it indicates every exercise of the body which tends to invigorate and develop its powers. Walking, running, riding, fencing, rowing, skating, dancing,—in short, every motion is a branch of the practice of Gymnastics. Like the “Bourgeois Gentilhomme,” who spoke prose forty years without knowing it, we find upon reflection that we have all our lives been unconsciously practising Gymnastics.

In a narrower sense, Gymnastics expresses those manly and healthful games which have been encouraged by all high-spirited nations, as conducing to keep up the physical strength and martial spirit of their citizens. In a yet more limited acceptance, it has of late years been used to denote that system of bodily exercise to explain which is the object of the following pages. It may be neither uninteresting nor useless to trace succinctly the rise and progress of systematic Gymnastics.

Even in the rudest stages of society, such as we find among some of the aboriginal tribes of America, we find the germs of a gymnastic education. We find the parents anxious to nerve their children for the labours which in after-life must procure them food,—the watchfulness and agility which must enable them to baffle their foes. From infancy they are trained, by a substitution of heavier and still heavier bows, to the practice of archery. Their little arms are instructed to stem the most rapid rivers. They are habituated to remain long beneath the surface of the water, and to make their way to its lowest depths. Running for a long continuance of time over the roughest ways, hurling missiles with their hands, wielding clubs or hatchets, are among the list of their accomplishments; and not the least extraordinary among their exercises are those by which they seek to harden themselves against the mastery of physical pain. It has been remarked,

that in proportion as this rigid training was sedulously enforced by the elders of the tribe, its members were found to advance towards the dignity of civilized man. The physical, the animal powers were developed with a degree of beauty and grandeur that reminded the beholder of the ideal creation of antique sculpture.* The individual, conscious of his strength, resources, and firmness, walked with a more independent tread and cheerful, fearless disposition.

The Greeks, at the period to which their oldest history goes back, seem to have been but little advanced beyond the stage of refinement which we have just been contemplating. Following their annals from the first obscure glimpses of tradition, down to the time when, on the loss of national independence, their spirit died within them, we find athletic exercises forming a prominent feature of the education of the young, and the pastime of those of mature years. At first they were equally rude and inartificial with those of the Indian tribes we have alluded to; but, in progress of time, areas and buildings were allotted for their practice, masters appointed, and prizes awarded to the greatest proficient, which were contended for in the presence of assembled nations with all the solemnity and inspiring pomp of a religious celebration.

* West exclaimed, on seeing the Apollo Belvidere for the first time,—“A Mohawk.”

The exercises of the Greek *athletæ*,—the hurling of the discus,—the running, wrestling, and *mélange* of boxing and wrestling,—the equitation and chariot-driving,—are known to every classical scholar. At first they were instituted with a view to hardening and strengthening the frames of the citizens, that they might the better be able to fight the battles of their country. By degrees, however, the natural vanity of being able to do any one thing better than one's neighbours, fostered to a preternatural strength by the preposterous adulation bestowed upon the victors of the games, introduced a habit of cultivating one power alone, instead of seeking to develop the whole bodily capabilities. A good wrestler, a carrier of immense weights, and the like, became articles of luxury. They were kept and fed like fighting-cocks, and for purposes of equal dignity and importance. The real soldier learned at last to despise the bully of the ring, and Gymnastics gradually lost repute, and at last became antiquated. The reader will find the history of their decline in Aristophanes: their death-warrant was the caustic remark of the Theban general.

Rome was from the first a huge camp. Her youth were trained to hardihood and exertion, but it was chiefly in active service, and as members of a great body. To act in unison, mutually to support each other,—to give impetus to the charge and preserve order in retreat,—discipline, in short,

was the object of their study. Their exercises were intended to train the great mass, not the individual. When in process of time the military became a distinct profession,—when the army was formed of Prætorians and the drafted legionaries from conquered countries,—Rome was found to have no efficient academy for training her citizens to active exercises. Her sons, instead of breasting the Tiber in armour, and riding or hurling the javelin in the Campus Martius, snatched a furtive and cowardly joy in witnessing the massacre of slaves by each other or wild beasts.

Respecting the gymnastic exercises of the Teutonic nations, who overthrew the Roman empire, no satisfactory intelligence has been transmitted to us. Some of the later historians of Rome speak with consternation of the manner in which the Germans, by the aid of their long *frameæ*, bounded over the pikes of their adversaries' foremost ranks, or sprung upon their battlements. Tacitus alludes to games in which the German youth, stripped naked, showed their fearlessness, quickness of eye, and liveness of limb, by springing about among spears and naked swords. These warlike exploits, and this scarce peaceful preparation, indicate long and effective athletic training.

During the dark ages, the peculiar mode of carrying on war which gained the ascendancy rendered it of the utmost importance that the knights and

men-at-arms should be subjected to a severe physical education. They were taught to bear during the heat of the day great loads of armour,—to carry huge burdens,—to run for a length of time,—to climb tall ladders by the aid of their arms alone,—to swim,—to ride the great horse,—to push with the spear against a target so arranged that he who missed or struck foul received a blow from a pole attached to it, at first on foot, afterwards mounted.

When the organization of armies became reduced to a set of systematic rules,—when the art of war became a series of arithmetical calculations,—and, finally, when the invention of powder had lessened the superiority of bodily strength,—athletic exercises were less insisted upon. The separation of the military as a distinct class, the increasing sedentary and literary habits of civilians during the last century, increased the evil. Physical education became neglected almost in the same proportion that every other branch was more widely diffused and zealously cultivated. It may be thought that it is stretching a favourite theory too far; but the writer of these pages does not hesitate to attribute much of the degrading mixture of sceptical habits with an almost insane superstitious belief in natural magic, which showed itself in such revolting features about the close of the eighteenth century, to the irritable nervous system, and consequent pre-

disposition to mental disorders, engendered by indolent and luxurious habits. It was a strange time, when philosophers were busy demonstrating that we had no souls, and the whole world agreed in letting the body degenerate as much as possible, through neglect of cultivating its capabilities.

Rousseau was the first to raise his voice against this degeneracy ; but the plague-spot had too thoroughly tainted his own constitution to admit of his exemplifying the doctrines he taught. The world in general laughed at the contradiction between his practice and precepts, without reflecting that a lame man may point out the way he cannot tread himself. A few enthusiasts, however, caught the flame ; and although some of their experiments were ludicrous enough, more rational regard to the preservation of a firm habit of body began to be paid. In all countries the manly amusements of an earlier age had preserved a traditionary existence among the peasantry. In some the pleasures of the chase had extended habits of hardihood and exertion even to the higher classes. Athletic exercises became fashionable once more. Our retrospect has led us on to the period at which the system of gymnastic exercises explained in this work was invented ; and to their brief history we now invite the reader's attention.

Every one has heard of the widely ramified confederacy which diffused the spirit of disaffection to

the French dominion through Germany, and prepared its inhabitants to co-operate in shaking off the yoke. Its leaders knew from the first that their object could only be effected by an appeal to the sword, and one of the first objects of their attention was to prepare as many soldiers as possible for the approaching struggle. While Von Stein, by his admirable arrangements, was communicating to almost every individual in the Prussian territories, who was capable of bearing arms, a notion of discipline and its importance, Jahn and his followers were establishing gymnastic areas (*Turn-plätze*) through the whole of Germany. Young men of different ages were encouraged and incited to attend them. They were accustomed to take pleasure in their exercises,—a spirit of emulation was sedulously cherished,—joke and merriment, the overflowing spirits of robust and healthy youths, rung across each area,—songs were composed to be sung by the friendly antagonists in chorus, as they repaired to the *Turn-platz* or returned from it, or when they crowded in the evening around their stoves. Nothing, in short, was omitted that could give popularity to these institutions.

The object, however, of the Directors was not merely to improve the physical education of the country, but to prepare a large band of able-bodied young men to take part in a contest that might daily be looked for. A system of exercises that

should develop the muscular powers speedily, as well as effectually, was a desideratum. With this view, a series of exercises with poles, bars, and ropes, similar in all essential particulars to those about to be explained, was devised and introduced into all the *Turn-plütze*, in addition to the usual routine of running, wrestling, and leaping with or without poles.

For some time after the defeat of Napoleon, these exercises continued to be patronized by the governments of Germany, and taught at all the public schools. It so happened, however, that the spirit which had been evoked to assert the rights of the old hereditary sovereigns, in opposition to Napoleon's new dynasty, was, like the demons of a magician, more ready to obey the spell-word which summoned it, than to depart when its task was accomplished. Among the loudest of the disappointed constitutionalists were some of the chief patrons of physical education. By some new and rather unintelligible logical process, the German rulers demonstrated to their own satisfaction that gymnastic exercises necessarily engendered democratical principles: and in consequence all the public institutions for their promotion were at once suppressed. A few private ones are still winked at, and the military in some of the states receive regular lessons; but the day of Gymnastics is over in Germany.

It is no new thing, however, to find a prophet,

who has no honour in his own country, received with the most flattering *empressement* in another. Those exercises, which in Germany have been subjected to the ban and anathema of the law, denounced as impious and sacrilegious, and driven back by the united influence of bell, book, and candle, have been enthusiastically patronized in France and Switzerland, and are even forcing their way into England.

Nothing earthly is privileged from abuse ; and quackery, which is ever ready with its imposing systems, was soon extended to Gymnastics. In the French Modern Encyclopædia we find it divided into :

1st, *Gymnastique civile et industrielle* ;

2d, *Gymnastique militaire, terrestre et maritime* ;

3d, *Gymnastique médicale* ;

4th, *Gymnastique scénique ou funambulique* ;

and each of these divisions subdivided four or five times, as, for example, the 3d is arranged in four parts:—*Gymnastique hygiénique ou prophylactique*, pour conserver une santé robuste ; *Gymnastique thérapeutique*, pour le traitement des maladies ; *Gymnastique analeptique*, ou des convalescens ; *Gymnastique orthopédique*. Celle-ci a pour but la guérison des déformités, &c. &c.

No such pretensions are here held out. By Gymnastics are meant merely those preparatory exercises performed with the aid of poles, bars, and triangles.

We have nothing to do with their moral and intellectual uses. But their importance, in another point of view, admits of demonstration. They are one with another calculated, if persevered in, to develop every muscle of the trunk, the legs, and the arms, to its utmost extent. They give the student the most perfect command over his whole body. They are thus the best preparatives for the elegant and manly accomplishments of fencing with the small or broad sword, and other active exercises. They afford, in like manner, an excellent school for amateurs of running, leaping, wrestling, and sparring. The advantages to be derived from such exercises are not confined to the soldier and sailor,—their use is felt when we pursue the sports of the field. But their importance can only be known when we are called upon by emergencies of unexpected danger—by fire, shipwrecks, the falling of bridges or buildings—to show the superiority resulting from the unshaken presence of mind and versatility of resources conferred by consciousness of physical strength and nerve. Rousseau says the body must possess vigour to be obedient to the mind; a good servant must be robust.

In conclusion, therefore, I would recommend the careful practice of Gymnastics to all who feel the importance of health and strength, and agree with Plato, that he is a cripple who, cultivating his mind

alone, suffers his body to languish through sloth and inactivity.

“The reason of a Sage may be coupled with the vigour of an Athlete.”

ELEMENTARY EXERCISES.

BEFORE commencing the more violent exercises, the pupils should be prepared by a course of comparatively gentle exertion, tending to strengthen the legs, loins, and upper parts of the body, under the direction of a master, who will increase the difficulty of the lessons in proportion to the powers of the class. Captain Clias and other gymnasts recommend long elementary practice in various modes of *walking*, *running*, and *jumping*, for the lower extremities; and for the preparation of the upper extremities, various lessons are given for raising, circling, bracing, and extending the arms.

The first eight exercises, however, shown in the following plates, will readily be understood, I hope, and will, if practised distinctly and carefully, form a sufficient preparation for the pupil before he enters upon the more complicated business of the Gymnasium.

After each of these simple exercises, there should

be a pause of a minute or two, which will be regulated by the strength of the pupil.

Where the pupils are of ordinary strength and activity, I should recommend some of these preparatory evolutions being practised with a small dumb-bell in each hand; and, after a few lessons of introductory movements, they may safely proceed to the use of the *Indian clubs*. The simplicity of this exercise, and the power possessed by the pupil of making it more or less severe, by increasing or diminishing the size of the instrument with which it is practised, induce me to recommend it first in the order of the gymnastic games. By going through the various positions with the clubs for a short time, the arms and the upper parts of the body become sufficiently supplied and strengthened to enable the pupil to commence with safety the more athletic games, of which we shall treat hereafter. The clubs vary in weight from two to twelve pounds, of course in proportion to the power of the gymnast. The Indians, who constantly use these instruments for exercise, have them sometimes double the weight of the heaviest introduced into our gymnasiums.

They admit of a considerable variety of useful and amusing lessons, but I shall confine myself to the regulation-exercises now adopted by the whole English army.

“The recruit, being placed in the position of

“ attention, with a club in each hand pointing down-
“ wards, must be exercised as follows :—

FIRST PART.

“ 1. At the word *one*, the club in the right hand
“ is slowly carried round the head, until the hand
“ arrives in a perpendicular line above the shoulder,
“ with the large end of the club pointing in a diag-
“ onal direction to the rear.—2. The club in the left
“ hand is raised in a similar manner, and carried over
“ that in the right hand, till it reaches a corresponding
“ position.—3. The hands are carried slowly to the
“ right and left, until they become in a true hori-
“ zontal line with the shoulders, the large end of the
“ clubs still remaining to the rear.—4. The hands
“ are brought slowly to the first position. Care must
“ be taken that the recruit does not stand with a hol-
“ low back during this and the succeeding practice.

SECOND PART.

“ 1. Raise both hands to the front, approaching
“ them close together, in horizontal line with the
“ shoulders, the clubs being held perpendicular, with
“ the large ends upwards.—2. With the body well
“ poised forward, separate the hands, and carry them
“ to the right and left in line with the shoulders, the
“ large end of the clubs still remaining upwards.—
“ 3. With the head well kept up, let the clubs turn

“ over till they point in a diagonal direction to the
“ rear, the hands still remaining out in line with the
“ shoulders.—4. With the arms extended, drop them
“ slowly to the first position.

THIRD PART.

“ 1. The club in the right hand is circled round
“ upon the *right* of the body for a few revolutions
“ of the circle, or until the word halt is given.—2.
“ The one in left hand is used in the same manner
“ on the *left* of the body, until the word halt is
“ given, when the recruit will remain perfectly
“ steady in the first position.—3. With the body
“ rather leaning forward, circle both clubs at the
“ same time, on the right and left of the body,
“ until ordered to halt.—*H. Torrens, A. G.*”

Some system of moderate and graceful exercise, which might be practised by young ladies in classes, has long been wanted. The clubs, susceptible of a great variety of interesting movements, all tending to increase the power of the arms and upper parts of the body, would go far towards removing malformations of the spine, and preventing consumption, and other pulmonary diseases, to which young ladies are frequently exposed from their confined and sedentary mode of education.

HORIZONTAL POLE.

The pupils, being prepared by these comparatively mild but active exertions of the body, may safely begin the lessons on the pole.

Plate 9.—The simplest exercise for developing the strength of the hands and arms is that which makes them support the weight of the body in the air.

Colonel Amoros calls this exercise “fermeté;” and in the Normal School for Gymnastics, under his superintendence, the length of time each pupil remains suspended in this position is registered. The greatest “fermeté” recorded by him is of a soldier of the name of Carbonier, who continued in this fatiguing position forty-two minutes; others are mentioned as having remained thirty-five minutes.

No 10.—When the hands and arms are sufficiently strengthened by this simple exercise, which may be varied by balancing the body backwards and forwards until you are able to support with ease your own weight, then, by bracing the muscles of the arms, draw yourself up till you cross the pole with your chest, as in plate 10.

No 11 is arrived at by a still further exertion of the muscles of the upper part of the body.

No 12 is easily understood to follow in the regular succession ; but the young gymnast must not be disheartened if he find considerable difficulty in accomplishing this movement, as well as the preceding one ; for, although they are both extremely simple in their appearance, they are movements which require considerable strength and practice.

No 13.—This is another position of *fermeté*, of which the plate itself is sufficient explanation, and from it a great variety of exercises are commenced ; but, from the limited nature of the present work, I am enabled to follow through only one series of movements.

No 14 is acquired by bracing the muscles of your arms, and drawing the body up as though you wished to touch the pole with your shoulder, from figure 13 ; and, while thus drawn up by a considerable effort, contract the muscles of the loins sufficiently to enable you to raise your left leg over the pole.

No 15.—From *No 14*, liberate the right hand from the pole, and bring it round to the same side,

and in front of the left ; then force the body up as in plate 15.

No 16.—Holding the pole sufficiently lightly to allow your hands to turn on it, from figure 15, balance with the right leg, and swing the body round into the position of *No 16*.

No 17 is arrived at by merely shifting the left hand on the pole from the outside to inside of the left thigh, and then dismounting, as from a horse, with the left leg.

No 18 represents the figure in motion round the pole from *No 17* to *No 9*.

Nos 19 and *20* require no explanation, beyond what has already been given, to enable the pupil to arrive at the position of the 16th figure.

It may, however, be necessary to enforce the importance of all these movements being slowly executed, and each separate position being dwelt in as long as the young gymnast is able.

No 21.—After placing yourself again in the position of *No 19*, brace the muscles of the arms, then of the lower extremities, and extend your legs in front, throwing the whole weight of the upper part of the body upon the hands.

No 22.—With the hands and arms remaining as they were placed in the preceding figure, throw the body still more forward, so that it may rest upon your elbows ; then, with all the muscles of the body well braced, force the legs slowly out to the rear, until you arrive at the position given in *No 22*.

These exercises are excellent for the loins, back, and arms, and may be frequently practised with considerable advantage to the pupil, who had better, perhaps, begin them on the lower bars, where he will have more confidence from the height than if he at once attempted them on the *horizontal pole*.

Nos 23 and 24 are movements commencing also from *No 13*, and progressing along the pole, alternately with the right and left hand.

When the pupil is strong enough, this exercise should be taken with the shoulder drawn up to within a few inches of the pole.

This particular exercise, so important to firemen, appears to have been carried to its highest perfection by them. In the gymnasium "*des Sapeurs-pompiers*" in Paris, they have poles forming a complete circle of the yard, round which a man of the name of Blondeau went twice without resting, a distance of 784 feet. This exercise is called "*la persévérance*."

The exercises upon this simple apparatus admit of great variety ; and although I have given examples of some of the most useful and amusing, yet

much is left to the ingenuity of the gymnast himself.

PARALLEL BARS.

The exact length, strength, and height of the bars must depend much upon the age and powers of the pupils ; but they should always be made circular, and vary from six to eight feet in length, and from three to four inches in diameter. They are fixed at about two feet apart, and at a distance of from three to four feet from the ground. The lessons are susceptible of great variety and interest, which may be increased by fixing the bars occasionally at six or seven feet from the ground. Sixteen movements on this apparatus are given by Captain Clias in his *Elementary Course of Gymnastics*, and thirty-eight by Colonel Amoros ; but, in pursuance of the plan laid down for this small Manual, I shall only give examples of five or six positions of this part of our subject.

No 25 will be easily understood : it consists in merely resting the weight of the body upon the hands while between the bars, in which position you acquire power by balancing yourself until you are able with ease to raise the feet to the height of the bars, both behind and in front. An excellent elementary practice from this position is, with the

feet kept closely together, placing the legs on the right and left bars alternately, both in front and behind, the impetus being obtained by balancing the body. Walking backwards and forwards upon the hands, along the bars, is also a good preparatory exercise, tending to strengthen the wrists, and in fact the whole of the upper part of the body. When the pupil is strong enough, this is done by springs moving both hands at the same time.

No 26.—This practice, which is merely sinking and rising between your arms, should be continued till you are able to sink low enough to rest the elbows on the bars, and rise again from that position.

No 27.—This position is arrived at after balancing the body backwards and forwards while resting on your hands between the parallel bars; and the exercise is varied by removing the legs from the one bar to the other, both in front and behind your hands, which remain stationary during the exercise.

Nos 28, 29, and 30 are positions on the parallel bars and top pole, combined upon which a great number of excellent and amusing exercises can be made to follow each other in progressive order. The series I usually commence with is jumping across the bars with the left hand down and the right holding the top pole, as in 28, returning with the

right hand down, as in 30; and then springing across the bars, holding the upper pole only, as in 29.

Walking along between the parallel bars with the body supported upon the hands, moving one hand at the time, or by springing both at the same time, sinking and rising off the elbows, and a great variety of exercises which the apparatus suggests to the pupil, may be tried with advantage and amusement.

ROPES.

They are used sometimes plain; sometimes with large knots in them; and sometimes with a bar across them. The ropes are placed vertically, horizontally, and at various inclinations, to give variety to the exercises, which is increased by loosening and tightening them.*

Nos 31 and 32.—The rope, which is smooth, is here suspended perpendicularly from the point of support, and the end of it is not fastened.

Nos 33 and 34 are positions on the bar-rope, which is an apparatus combining some of the ad-

* Colonel Amoros divides the subject thus :—" Le premier traitera des cordes nouées ; le second, des cordes lisses, verticales, simples et doubles ; le troisième, des cordes lisses, horizontales ou en plan incliné ; le quatrième, des cordes lisses, doubles, horizontales ou en plan incliné."

vantages of the ladder and rope. Double ropes, placed parallel to each other, either upon the inclined plane or perpendicular, give considerable variety to these amusements.

THE TRIANGLE AND TRAPEZE

Are perhaps two of the most amusing instruments in our modern gymnasiums, and give, from the lightness of their construction, and their being constantly in motion, an appearance of grace and ease to all the evolutions executed upon them.

Whether we are indebted to Captain Clias for the invention of the *triangle*, or, as appears more probable, to the mountebanks of Italy, who used it to amuse the public long before our gymnast had started on his career of fame, and whether the *trapeze* owes its origin to Colonel Amoros, is equally unimportant to the present subject, and I must leave the decision of it to these gentlemen themselves.

The *triangle* always preserves the same form, whereas the trapeze, or trapezium, admits of variety, by changing the inclination of the side ropes which support the seat, always preserving the form of a quadrilateral figure, whose four sides are unequal.

These apparatus should be strongly suspended,

so that the bar or seat be about five feet from the ground.

Nos 35 and 36 are two simple exercises on the *trapeze*, which follow each other in natural succession; the latter movement in fact being merely a turn of the body, by which you seat yourself on the bar.

No 37 explains itself.

No 38 is arrived at by bracing the muscles of the upper part of the body, and forcing yourself round from *No 37*.

THE WOODEN HORSE.

The *wooden horse*, although extremely interesting from the number of exercises practised upon it in *vaulting*, *leaping*, and in feats of actual strength, appears as yet but little known in the small gymnasiums established in this country. It is necessary that a regular succession of sizes of these quadrupeds be established, to suit the height and progress of the different classes.

No 39.—This position, which will be easily un-

derstood, should be taken by leaping over the horse's croup into the seat of the saddle.

No 40.—Rest the weight of the body upon the arms, and by a spring force the legs up into the air, where you will cross them, so that when you descend into your seat again it will be with the front changed,—that is, with your face towards the croup.

No 41 is the position in which you come down into your seat from *No 40*.

The vaulting, tumbling, and leaping exercises, are very numerous upon the wooden quadrupeds; but, even if my space were not so much restricted, I should not enter more into detail with them, as every young person who has seen what is called “still-vaulting” at Ducrow’s, or any other amphitheatre, knows nearly all that this apparatus is susceptible of, and will be able to go on increasing the difficulty of his practices, without the assistance of a treatise on the subject.

THE LADDER.

The *wooden ladder* is usually fixed firmly between two walls, with the lower end of it just high enough for the pupils to reach it with both hands, at the

same time the height increasing by a moderate ascent. It is also sometimes placed nearly perpendicularly with one end resting on the ground ; but the exercises admit of more variety when it is fixed as first recommended.

The distance between the bars upon the perpendicular *ladder* is usually from eight to twelve inches ; but when its position is inclined, I should prefer the spaces being always wide enough to allow the pupil to pass easily through them.

It is essential that the sides and bars be carefully and smoothly rounded.

The simplest exercises are ascending and descending with one hand placed on each side of the ladder, and the body below it, with the face turned towards the upper end of the apparatus. This exercise is equally easy ascending backwards. Going up with both hands on the one side, and, when at the upper part, crossing and coming down in the same way, is an excellent exercise for the upper parts of the body.

No 42 shows the body in motion whilst ascending from bar to bar upon the inclined ladder ; but in this plate the inclination is less than I should recommend for ordinary practice.

“Boucicaut, or Jean de Meingre, maréchal de France, who commanded the vanguard of the French army at Azincourt in 1415, and was there made prisoner, and died in England in 1421, used to go

up on the lower side of a ladder, leaning against a wall, without touching it with his feet, but only by jumping with both his hands together from one bar to the other, and that he would do armed with a steel coat; and, having taken off the armour, with one hand alone he could ascend several bars; and these things are true, and by many other hard exercises of such sort, he so hardened his body that his equal was hardly to be found.”*

The *rope-ladder* is susceptible of still more change of position, and the bars are usually placed closer together, as few movements beyond the different

* “Boucicaut at one time used to accustom himself to leap in full armour on the back of a horse, and often he would walk or run long distances to give him long breath, and enable him to bear much fatigue. He also used to strike for a long time with an axe or heavy hammer to harden his arms and hands, and to accustom himself to raise his arms readily.

“By following such exercises, he strengthened his body so greatly that in his time there was no gentleman to compare with him.

“He could throw a somerset completely armed except his basnet, and would dance when armed with a steel coat. In full armour, and without putting a foot in the stirrup, he would jump on the back of a war-horse. He would also jump from the ground astride on the shoulders of a big man or a tall horse, without other help than a hold of the sleeve of a man’s jerkin. Holding with one hand by the pommel of a saddle, placed on a high horse, and with the other grasping the mane a little below the ears, he would from the ground jump through his arms to the other side of the horse; and he would ascend between two side walls of plaster, at the distance of a fathom from each other, and by the force alone of his arms and legs, without other aid, without falling either going up or coming down.”—*Extracted from his Life, pour servir à l’Histoire de France.*

modes of ascending and descending are practised upon them.

No 43 is a simple method of going up the loose perpendicular rope-ladder.

Not being able to follow through any regular series of lessons upon this really most amusing apparatus, I have thought it preferable giving four figures, as unconnected in their operations as possible, to show the infinite variety of exercises to be attained on a common ladder, by changing its position and somewhat altering its form.

Nos 44 and 45 are unconnected figures, intended to direct the pupil's attention to the various ways in which this simple apparatus is used.

THE MASTS OR POLES.

The exercises on the poles are varied by their being placed in different positions, either upright or vertically; and by the introduction of rope-ladders, and also plain and knotted ropes, &c., the games are rendered complicated and highly amusing.

Nos 46 and 47.—There is little difference between these two positions, which are intended to

show the pupil the simplest mode of ascending the vertical and perpendicular poles.

No 48 is ascending without making use of the legs, and with the side turned towards the pole.

No 49 is commenced from the preceding position, but it is an extremely difficult exercise, and only to be acquired after considerable practice and experience in the gymnasium.

Nos 50, 51, 52, and 53 are the simplest and easiest modes of ascending a plain loose rope.

In pursuance of my somewhat sketchy plan, I now proceed to

THE INCLINED PLANE,

Which is ordinarily an unpolished board of pine, varying from twenty-five to thirty feet in length, and two feet broad, admits of some highly useful exercises, and has been recommended by medical men as tending to strengthen the hands, the arms, the chest, the abdomen, the legs, and feet.

The *inclined pole* also admits of some excellent exercises.

THE FLYING COURSE, OR GIANT STEPS,

Is amusing for young people; but as it affords no advantages that are not fully attained by the practices already recommended, I shall enter into no details of it, particularly as it is both bulky and expensive.

THE DYNAMOMETER,

For measuring the weight of blows, for ascertaining the comparative powers of different pupils in various ways, such as lifting, &c., is essential in a gymnasium. It occupies little room, and is very useful in marking the increase of power in the different pupils. This is done by a book kept for the purpose, in which each pupil's power is registered when he joins the class, so that the increase of his strength may at any time be proved.

From the extensive range of exercises coming under the head of Gymnastics, it will easily be seen that a complete gymnasium is not to be found; it is therefore an object of importance to select only those instruments which are sufficient for the most robust and accomplished gymnasts, and afford amusing exercises for the weakest constitutions, leaving unnoticed those of an expensive and bulky character in this description of a small unostentatious apparatus.

Colonel Amoros, in his Reflections upon the Establishment of Military Gymnasiums, considers it as a "*sine quâ non*" that every gymnasium should consist of,

- " 1. Une poutre placée par terre sur des tasseaux.
2. Mât de voltige.—3. Cheval de voltige.
4. Echelle à sauter en profondeur.
5. Portique simple ou double.—6. Trapèze.
7. Echelle de bois.—8. Petits mâts et les autres instrumens qui s'y rattachent.
9. Mâts verticaux de 25 pieds.—10. Echelle de corde.
11. Echelle à console.—12. Corde nouée et corde lisse de la longueur de mâts.
13. Barres parallèles.—14. Sautoir fixe.
15. Perches à suspension.—16. Fossé à sauter en largeur.—17. Planche.—18. Vieux mur.
19. Cercle de pierres et de piquets.
20. Stade pour les courses.—21. Dynamomètre.
22. Boulets.—23. Bâtons à lutter.
24. Sautoirs portatifs."

Our complicated modern European gymnasiums form a striking contrast with the Arabian "Houses of Strength," of which the following is a description :—

"The Persians have houses which they call Sur-chône (the House of Strength), into which any one may go to make exhibition of his strength. The

first exercise which was used consisted in placing the hands and the feet on the ground, and stretching them as far as possible from each other, without touching the ground with the stomach. Whilst in this position a circle was described with the head, and, after every second circle was completed, the diameter also. Some did this at least eighty times.

“Then some took in each hand a large piece of wood rounded, and moved them in different ways on their shoulders, forwards and backwards. Some pushed with their feet against a board placed obliquely against a wall, and some walked about on their hands on the floor. Many began to spring about, sometimes on one foot, sometimes on both, and this as strongly as possible, in order to exercise the body more. Some laid themselves on their backs, with cushions under their heads and arms, and in that posture raised in each hand a very heavy piece of wood, according to a certain tune that was played to them. Few performed this, as it requires uncommon strength. The teacher then placed them all in a row, and then made them go through a great variety of different motions, which, however, I am unable to describe. After this they began to wrestle in pairs, and when one was thrown flat on the ground, he reverentially kissed his conqueror’s hand. No blows were given, however, as the English do when they box.”—*Niebuhr’s Reisebeschreibung nach Arabien, &c.*

BRITISH GYMNASTIC GAMES.

It would be making an invidious distinction, were we, in a work like the present, to allow our own excellent National Games to remain unnoticed,—national I presume to call them, although in most cases their origin is as ancient and classical as those already discussed ; but their adoption and continued improvement are peculiarly British. They merit notice, not merely as they are national, but as they mostly combine strength, perseverance, and courage, in an eminent degree. The importance attached to superiority in particular games in some parts of England is so great, that the defeat of a champion is a disgrace to a county. *Wrestling* is introduced conspicuously in all works on the present system of Continental Gymnastics, and to this I cannot object ; but it is only “fair play” that it be understood, that, whilst this manly exercise is little more than theoretically known on the Continent, in some of the English counties practical wrestlers stand unrivalled. I therefore must claim this as one of our own games, and put in a word for its

champions, who are ever ready to enter into competition with any foreign gymnasium. *Boxing* (leaving the question of whether prize-fighting tends to brutalize the lower orders, or increases the love of courage and fair play, in the undecided state in which I find it), I have no hesitation in recommending, as an exercise which brings the body into active and healthy exertion, increasing the elasticity of the limbs, improving the lungs, and giving the pupil a firmness on the legs and a power in the arms otherwise not easily acquired.

Quickness of eye, and accuracy in measuring distances, are acquired by the practice of boxing; and I may add, that our confidence must necessarily be increased in the moment of danger by a knowledge of our own power and resources. When I speak of boxing, I mean that friendly sort of imitation battle called "*Sparring*," practised by gentlemen, not with the "*cestus*," but with *well-stuffed soft gloves*, and that under the eye of some master who has sufficient influence to prevent any loss of temper, or the attempt of any thing beyond that useful practice, which will advance the mental and physical power of his pupils.

Riding, Walking, and Running, are exercises requiring activity, perseverance, and strength; and I should add, as a nation our recorded equestrian and pedestrian feats might challenge Europe, had I not before me the startling statement, that three French-

men, named Gervois, Labat, and Stumon, can run a French league in ten minutes. This surpasses any thing in our sporting annals; and were these gentlemen in England, they might by this superior fleetness soon *run off* with a fortune.

Archery, one of our most ancient and manly recreations, is still kept up with great spirit in many parts of England and Scotland; and although its champions succumb to Sir Walter Scott's hero of *Ivanhoe*, yet the spirit of emulation, which urges them on to excellence in all their sports, has not forsaken them in their pursuit of this graceful and healthy amusement.

The *élite* of modern archers are to be found in the Toxopholite Society in England and the Queen's Body-Guard for Scotland.

Cricket is so indisputably our own, that I need say nothing on the subject.

Single Stick has now but a small number of admirers, and its professors are of course still more limited,—in fact, we seldom see it practised but for interested motives. As an exercise for gentlemen I cannot recommend it. Fives, or Hand-ball, Quoits, and Bowls, are English, and have many amateurs,—they are decidedly good exercises.

Putting the Stone and Throwing the Hammer come more appropriately under the head of Scotch Gymnastics. There are instances, in the Highlands, of celebrity in throwing the hammer being handed

down from father to son, for generations, as a distinguishing family characteristic. In one of Sir Walter Scott's works it is most graphically described in the struggle between Norman Nan Ord and his favourite Hal o' the Wynd,—a perfect prince amongst the gymnasts of that age.

The Scottish national games are kept up at the present day, by the nobility and gentry, with a spirit that shows they are aware of the importance of preserving the physical strength and energy of themselves and their dependants.

The St Fillan's Club, meeting in that enchanting spot at the foot of Loch Earn, in Nature's own amphitheatre,—the St Ronan's Border Club, assembling on the banks of the Tweed,—draw together every year the pride of birth and the beauty of Highlands and Lowlands; and last, though not least, we have in the centre of our own metropolis the Six-Foot Club, instituted for the express encouragement, practice, and promotion of all national and manly games.

THROWING THE HAMMER.

The hammers used for this exercise vary in weight from 10 to 22 lbs.; the shaft or handle is made of thin ash, and long according to the status of the thrower. If the weight be under 14 lbs., throw single-handed, with one or more turns of the

body ; if from that to 18 lbs., throw with both hands and with one turn ; if above that weight, throw with both hands and without a turn.

The second mode is generally deemed the most efficient and graceful, and best calculated for concentrating the muscular powers of the thrower.

The following throws, correctly measured from a ground-mark, over which no part of the body was allowed to pass, stand at the head of recorded hammer-throwing of the day :

First mode, 10 lbs. hammer. The medal was gained in 1828, at St Ronan's, by Mr Scougall. Distance thrown, 115 feet.

Second mode, hammer between 16 and 17 lbs. weight. The distance thrown by Adam Wilson, Esq., which gained the Six-Foot Club medal, was 91 feet. The St Ronan's Border Club medal was also gained by this gentleman. Best throw, 87 feet.

The Six-Foot Club medal was gained in 1830 by — Martin, Esq. Best throw, 81 feet.

Third mode, 22 lbs. hammer. The best recorded throws are 66, 68, and 70 feet.

PUTTING THE STONE.

Proficiency in the ancient exercise of putting the stone is more speedily attained than in that of throwing the hammer. Care must be taken that

the ball or stone be *putted straight* from the shoulder, otherwise, it is not *putting* but throwing. The putter stands with his left foot in advance close to the mark, except in matches where a run is allowed. The proper weight of the ball is from 18 to 24 lbs.

BEST RECORDED THROWS.

22 lbs. stone,—31 feet 10 inches gained the Highland Club medal.

18 lbs. stone,—34 feet 7 inches gained the Six-Foot Club medal.

Both these prizes were won by A. Wilson, Esq. without a run.

The various prizes this gentleman gained for rifle-shooting, broadsword, running, leaping, throwing the hammer, putting the stone, &c., are unerring testimony in favour of his great powers as a universal gymnast.

This is an accurate record of what was done in these games, nearly twenty-five years since, at a time when they were much cultivated by a body of powerful young men, belonging to the Six-Foot Club, who attended most of the public meetings for Highland games. It will be curious to observe what is done a quarter of a century later by the champion of his day; and Donald Kennedy, who has carried off a hundred and sixty prizes at the different competitions, may fairly be taken as the champion.

At the northern meeting, in 1851, he threw the 16 lbs. hammer 86 feet 6 inches, and the 12 lbs. hammer 105 feet 1 inch. And, at Holland House, in August 1852, we find him throwing the 17 lbs. hammer the surprising distance of 107 feet. He is recorded as putting the heavy ball of $21\frac{1}{2}$ lbs. 33 feet; and one of $17\frac{1}{2}$ lbs. 36 feet.

We, however, find at Leith, in 1853, a Mr Flanagan putting a ball of 22 lbs. 33 feet 4 inches.

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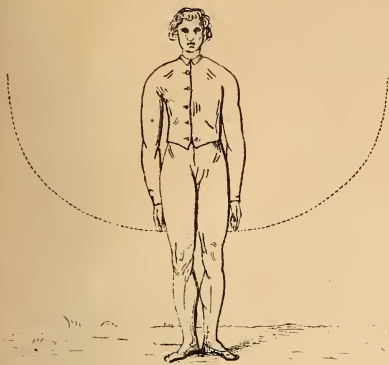
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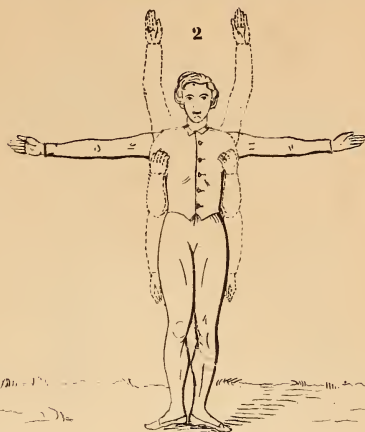


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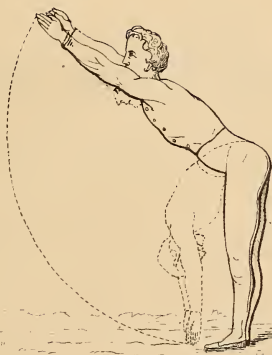
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GYMNASTICS.

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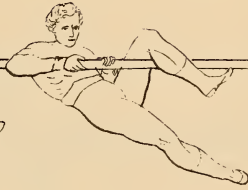
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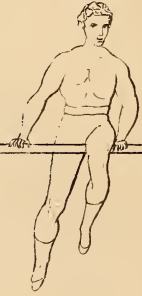
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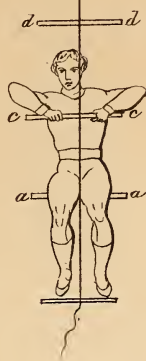
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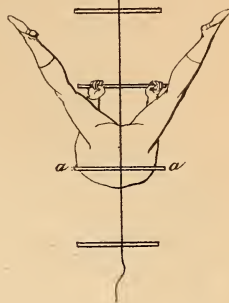
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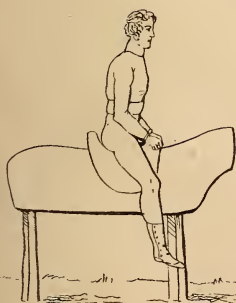
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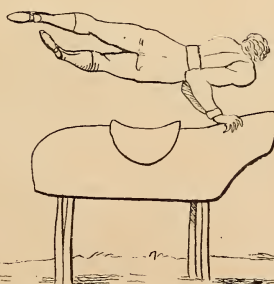
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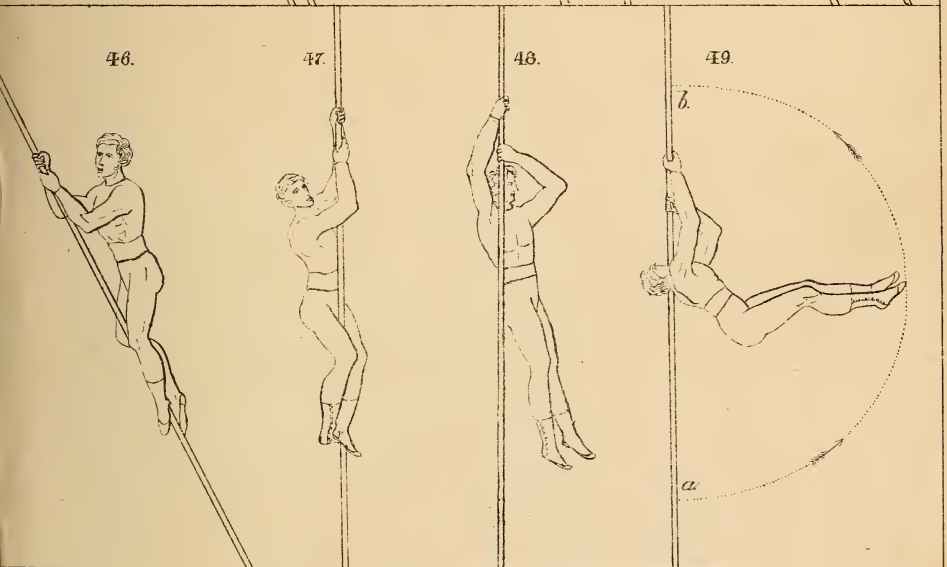
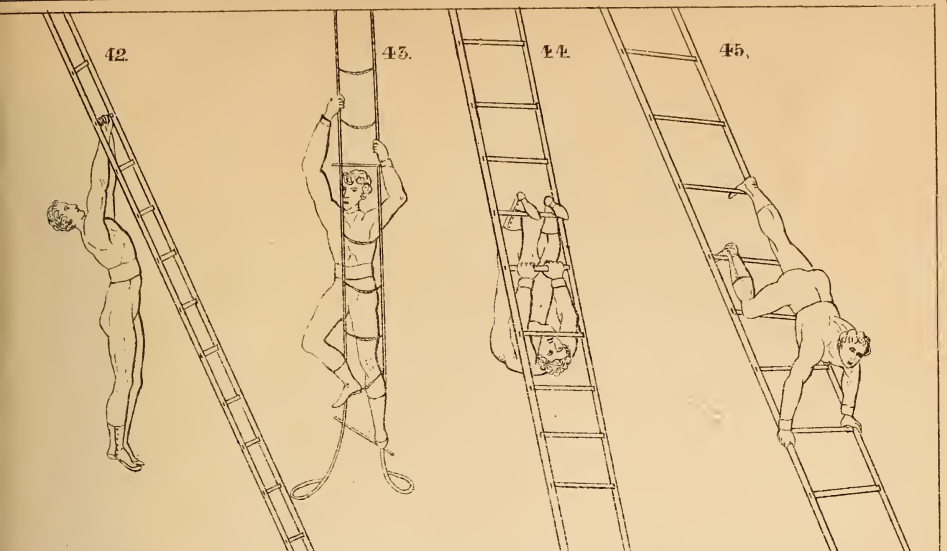
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GYMNASTICS.





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